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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,154	06/20/2000	Gregory David Olson	P18652	5104

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GREENBLUM & BERNSTEIN, P.L.C.  
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RESTON, VA 20191

EXAMINER
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SWERDLOW, DANIEL

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

09/597,154

Applicant(s)

OLSON, GREGORY DAVID

Examiner

Daniel Swerdlow

Art Unit

2644

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 17 March 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The reply was filed after the date of filing a Notice of Appeal, but prior to the date of filing an appeal brief. The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: applicant's arguments are not persuasive. see attached.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: Note attached PTO-892 and reference.

***Response to Arguments***

1. Applicant's arguments filed 17 March 2005 have been fully considered but they are not persuasive.
2. In the third paragraph on page 3 of the response filed on 17 March 2005 applicant alleges that there is no motivation incorporate the teaching of Atkinson to the terminator taught by Pett. Examiner respectfully disagrees. The teaching in Atkinson that a diode protects components from surges on a telephone line is applicable to any component or device connected to such a line. Since the undesirable effects of electrical surges on components and devices is well known, one skilled in the art would have motivation to incorporate protection from such surges in the bridged tap terminator disclosed by Pett. Further, with reference to Fig. 7 in Pett, a diode placed across the connection between the bridged tap 32 in Pett and the terminator 50 would be in parallel with the series combination of capacitor  $C_A$  and resistor  $R_A$  and, therefore, in parallel with  $C_A$  as well as being in parallel with capacitor  $C_L$ .
3. In the paragraph spanning pages 3 and 4 of the response, applicant alleges that Atkinson is nonanalogous art. Examiner respectfully disagrees. Atkinson, Pett and applicant's invention are all related to devices connected to telephone lines. As such, the teaching in Atkinson of a way to protect such devices from adverse conditions on such lines is applicable.
4. In the first full paragraph on page 4 of the response applicant alleges that the application of the teaching of Atkinson to the terminator disclosed by Pett is not motivated because it would result in complication of the impedance matching taught by Pett. Examiner respectfully disagrees. One skilled in the art would be able to overcome this complication and would, therefore, have a reasonable expectation of success in making the combination. Evidence of this

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ability is given, for example, in US Patent 4,348,669 to Braun, which discloses the use of a cathode to cathode connected zener diode shunt a lightning surge limiter for a telephone line interface (column 5, lines 24-27). Such a configuration would be entirely non-conductive at normal operating voltages and would, therefore, not complicate impedance matching. Braun is cited here only as evidence of the capability of one skilled in the art and not as new grounds of rejection.

5. From the paragraph spanning pages 4 and 5 to the paragraph spanning pages 5 and 6 of the response, applicant alleges that the impedance matching taught by Pett does not inherently reduce echo effects from the bridge tap. Examiner respectfully disagrees. While Pett does not specifically disclose the reduction in echo from impedance matching, it is a well known effect.

This is shown, for example, by the National Instruments document, which says:

When high-frequency signals are carried on transmission lines of any significant length, care must be taken that the transmission medium is matched to its terminations. The source and load impedances should equal the characteristic impedance of the transmission line, as this minimizes signal reflections. The presence of impedance discontinuities or mismatches will degrade the amplitude and phase accuracy, as well as the temporal fidelity, of measurements made with a digitizer.

The National Instruments document is cited here only as evidence of the inherency and not as new grounds of rejection.

6. In the second complete paragraph on page 6 of the response applicant alleges that the bridge tap terminator in Pett has not been shown to inherently change a resonance characteristic of a bridgetap line to a bridgetap line longer than 650 feet. Examiner respectfully disagrees. As stated in the prior Office actions, the capacitance of 26 gauge telephone line is on the order of 0.07 microfarads per mile (see Reference Data for Radio Engineers, p. 111). As such, the terminator disclosed by Pett adds capacitance (i.e., a resonance characteristic) equivalent to an

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additional bridged tap length of (0.023/0.07) 5280 feet or 1740 feet. As such, the terminator disclosed by Pett inherently changes the capacitance of the bridged tap to that of a bridgetap longer than 650 feet.

7. In the paragraph spanning pages 6 and 7 of the response, applicant makes arguments concerning particular claimed values for the capacitance value. As stated in the prior Office actions, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize the capacitance values claimed. Applicant has not disclosed that the capacitance being the claimed value provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with a capacitance of 0.023 microfarads (Pett: column 5, lines 25-29) because of the extreme variability in the properties of the bridged tap. Therefore, it would have been obvious to one of ordinary skill in the art to modify the combinations already shown to be obvious to obtain the invention as specified in the claims.

8. In the paragraph spanning pages 7 and 8 of the response, applicant makes arguments regarding the dependent claims that are limited to their dependence from the independent claims. These arguments are unpersuasive for the reasons stated above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
ds

30 March 2005

  
**SINH TRAN**  
**SUPERVISORY PATENT EXAMINER**